

Health facility utilization and Healthcare-seeking behaviour of the elderly population in India

Roopani, Neha Dumka, Tarannum Ahmad, Erin Hannah, Atul Kotwal

National Health Systems Resource Centre (NHSRC), Technical Support Institute with National Health Mission, Knowledge Management Division (KMD), NHSRC, Delhi, India

ABSTRACT

Background: The increasing elderly population in India has generated an unmet need for healthcare services concerning them. To address some of those needs, the study aims to provide the current status of health facility utilization, health-seeking behaviour (HSB), and factors influencing them. **Methodology:** Data from the Longitudinal Ageing Study in India (LASI)-Wave I was used to conduct multivariate analysis to assess the association between health facility utilization (inpatient and outpatient) and HSB across all age groups of the elderly. **Results:** The likelihood of utilizing public health facilities increased with age for OPD and decreased with age for IPD. HSB was 23% less in the 80 years and above elderly as compared to other age groups. Healthcare service uptake was higher in the elderly with health insurance in a public health facility. **Conclusion:** Improving health insurance coverage among the Indian elderly may potentially improve healthcare service uptake in public health facilities.

Keywords: Aged, elderly, facility utilization, health-seeking behaviour, inpatient, outpatient, public facility

Introduction

Population shift toward older age is population aging, it is one of the most important global trends in the 21st century and considered as ‘century of elderly persons’, whereas, the 22nd century is expected to witness a phenomenon of ‘aging of the aged’.^[1,2] According to the World Health Organization, individuals aged 60 years and above are considered elderly.^[1] Globally, the elderly are the fastest-growing age group, which is projected to double from 12% in 2015 to 22% by 2050 and triple by 2100.^[1,3] In 2050, among the elderly population, 80% will belong to low- and middle-income countries. With the pace at which the elderly population is increasing, all countries need to ensure that their health and social systems

are prepared to support this demographic shift to provide healthy aging.^[1,4]

India is also likely to witness a similar trend of increase in the elderly population over the next few decades. In India, the elderly population accounted for 8% of the total population in 2015, further estimated to increase to 15% by 2036 and 19% by 2050.^[3,5] Also, longevity at the age of 60 years and 80 years will increase and is projected to rise by 21 years and 8.5 years by 2050, respectively. This demographic transition led to an increase in the old-age dependency ratio from 5% in 1960 to 9% in 2018 and is projected to be 19% over the next three decades.^[6] According to the National Sample Survey (NSS), 75th round, 27.7% of the elderly reported illness at the country level.^[7] Population aging poses a demographic burden on countries with inadequate and low public investment in the health sector.^[8] Also, there is a scarcity of infrastructure, limited human resources, specialized medical practitioners, affordable treatment, insurance coverage, and pension schemes for the elderly. Inadequate provision of elderly care services makes healthcare services more difficult to access and affordable.^[9-11]

Address for correspondence: Dr. Roopani,

C-92, Divya Jyoti Apartment, Sector 19, Rohini, Delhi - 110 089, India.

E-mail: dr.roopanichauhan@gmail.com

Received: 08-03-2022

Revised: 08-09-2022

Accepted: 09-09-2022

Published: 31-05-2023

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/jfmpc.jfmpc_553_22

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Roopani, Dumka N, Ahmad T, Hannah E, Kotwal A. Health facility utilization and healthcare-seeking behaviour of the elderly population in India. J Family Med Prim Care 2023;12:902-16.

Despite the increasing elderly population, its healthcare services remain limited, whereas the need keeps increasing to have healthy aging. The need to have comprehensive elderly care across the country at various levels of healthcare led to the launch of the “National Programme for Health Care of the Elderly” (NPHCE) in 2010 by the Ministry of Health & Family Welfare (MoHFW), Government of India (GOI). Program components include healthcare-service delivery at each level of care overseen by the National Health Mission, tertiary healthcare services provided through Regional–Geriatric Centres and National Centres of Ageing under the ambit of Rashtriya Varisth Jan Swasthya Yojana, and longitudinal research was undertaken (LASI).^[12] Another crucial step undertaken by MoHFW to make affordable healthcare is Ayushman-Bharat, launched in 2018, with an approach of the continuum of care with two components: Health and Wellness Centres (HWCs) and Pradhan Mantri Jan Arogya Yojana (PMJAY). HWC is committed to delivering an expanded range of services with “Elderly and Palliative healthcare services” as one of the services to support healthy aging.^[13,14] Despite the efforts made by GOI to provide comprehensive primary healthcare, utilization of the public-health sector remains low in comparison to the private. According to the NSS, public and private healthcare in urban areas is 26.2% and 71.6% and in rural areas is 32.5% and 62.2%, respectively.^[7] The increasing elderly population is inadequately supported with appropriate healthcare services, which are essential for facilitating healthy ageing, along with other determinants.

With this backdrop of the raising elderly population and limited healthcare services dedicated specifically to them, overall, there is less utilization of public-health facilities despite the government efforts. It is necessary to analyse healthcare utilization and health-seeking behaviour (HSB) among the elderly so that health systems and policies can facilitate healthy aging. The objective of this study was to analyse health facility utilization for out and in-patient services and HSB of the elderly population, along with factors affecting it, at the national level.

Materials and Methods

Data source

The study was based on secondary data analysis for which data were extracted from the first round of the LASI wave-I Survey (2017-18). It was a national survey, conducted from April 2017 to December 2019, and collected information on four major domains: Health, Healthcare financing, Social, and Economic. Data were collected for 42,949 households, and 72,250 individuals across 29 states (except Sikkim) and 6 union territories of India. LASI used three instruments for the survey, i.e., household schedules, individual schedules, and community schedules.^[15] For this study, the Individual-Schedules data were used because it captures the information on health, social, and economy for an individual as a unit for the current study.

Study-population

Individuals aged 60 years and above were included in the current study. Out of 72,250 individuals, 31,464 were aged 60 years and above.

Data handling

The study focused on the elderly; therefore, the selected sample was categorized into three groups 60–69 years, 70–79 years and 80 years and above to analyse the research objective at the national level by using frequency-weight as per the LASI data. The study estimated health facility utilization for in-patient (IPD) and out-patient (OPD) services by categorizing the facilities as public, private and others. To observe the preference for IPD, “public facilities” included government facilities, whereas “private” included private hospitals, nursing homes and NGOs/charities/trusts/church-run hospitals and “others” were partial private/government/NGOs. For OPD, “public health facilities” included health post/sub-centers; primary-health centers/urban-health centers; community-health centers; district/sub-district/hospital; government/tertiary/hospital; Govt.-AYUSH hospitals; whereas “private” included private hospital/nursing home; private clinic; NGO/charity/trust/church-run hospital; private AYUSH hospital, and “other” meant health camp; mobile-healthcare-unit; pharmacy/drugstore; home-visit.

For HSB individuals who visited any health facility (public/private) or opted for advice from any health professional/provider in the last 12 months were considered as ‘YES’ (those who seek healthcare). Those who neither visited any health facility nor opted for any medical advice from any provider in the last 12 months were considered as ‘NO’ (those who did not seek medical advice even though it was required). Individuals who did not seek healthcare because they were not sick in the last 12 months were excluded from the analysis.

Health insurance (HI) was generated by clubbing the individuals covered by any health insurance which covers the charges of surgery, diagnostics tests, doctor’s visits, medicines, dental care, in-home care, hospitalization charges, and other charges. Further, it was categorized as HI covered as “YES” and not covered as “NO”. The pension was estimated for officially retired members by work-related pension, excluding all other elderly; hence its total number was not as same as the other variables.

Statistical method and analysis

The study used dependent variables for health facility utilization, which was IPD/OPD; another was HSB. Bivariate analysis was done to find a correlation between IPD, OPD, and HSB with increasing age, and percentage distribution (cross-tabulation) was calculated to estimate differentials in health facilities (public, private, and other) utilization and overall HSB by predictor variables. Also, the distribution of all three elderly age groups concerning various co-variables was estimated.

Multivariate analysis was done to assess the association between health facility utilization for IPD and OPD, and HSB, and factors

affecting them, across all ages of the elderly. The model was created by using a forward-stepwise selection of covariates, adding variables one by one, which was selected based on the significant association of bivariate analysis and previous studies. The final model was adjusted for living arrangements, caste, physical impairment, difficulty in walking, taking care of grandchildren, lack of food security, covered with medical reimbursement from an employer, and financial support received. STATA-16 was used for data management and analysis.

Results

Demography

Supplementary Table 1a depicts the results for various socio-demographic characteristics of the elderly in Indian rural and urban areas. The proportion of elderly decreased with increasing age at the national level. The majority of Indian elderly did not attend school, were currently married, not working currently, and not covered with any pension and HI, and almost similar distribution in each MPCE quintile. In rural and urban regions, the percentage distribution of the elderly was almost similar to the overall national estimates with each characteristic.

Health Facility Utilization and Health-Seeking Behaviour (HSB)

Distribution of health facility utilization for IPD among elderly by different characteristics

The current study observed that in comparison with the public, private healthcare facilities were utilized more for IPD services. The proportion utilizing public health facilities increased with the age of elderly with the highest among 80 years and above and the lowest at 60–69 years. In rural and urban regions, approximately 60% utilization of private health facilities was observed in all ages, except 80 years and above of an urban region. Both male and female preference for utilizing public health care facilities was less, across all age groups. As education and MPCE quintile increased, the level of utilization of public health facilities decreased. Across all age groups, irrespective of marital status, working status, pension, and HI coverage, utilization of public health facilities for IPD services was less than private [Supplementary Table 2b].

Distribution of health facility utilization for OPD among elderly by different characteristics

At the national level, more than 60% of private and 20% of public healthcare facilities were utilized across all ages. In both genders, utilization of private in comparison to public healthcare facilities was more across all age groups. Private healthcare utilization ranged from 55% for the illiterate to 90% for the highest level of education. Also, utilization of private healthcare facilities for OPD was the maximum for those aged 80 years and above, almost at each education level. The study observed not the working elderly also preferred to utilize private over public healthcare facilities across all age groups. Not much influence of pension and HI coverage was observed, across all ages, the

preference for OPD services was private over public health facilities. Among all the levels of MPCE quintile and education, the elderly preferred to utilize private over public health care facilities [Supplementary Table 3c, Figure 1].

Distribution of HSB among the elderly population by different characteristics

The current study observed a significant decrease in HSB with age at the national level. It was the maximum at age 60–69 years, and almost 50% reduction was observed for 70 to 79 years and 80 years and above. A similar trend was observed with other covariates: region, gender, education, marital status, pension and health insurance coverage, and MPCE quintile, across all age groups [Supplementary Table 4d].

Factors affecting the health facility utilization and HSB

Factors affecting the health facility utilization for IPD and OPD among the elderly

After adjusting for various covariates, the likelihood of utilizing public health facilities for OPD increased with age; however, for IPD services, it decreased with age. The likelihood of utilizing public health facilities by females was 60% more for IPD and 8% less for OPD when compared to males. The likelihood of utilizing public health facilities for OPD was significantly highest in currently married, whereas for IPD, it was the highest in widowed. HI coverage had a positive association with utilizing public health facilities for both IPD and OPD. A negative association was observed between education and the MPCE quintile, as the likelihood of utilizing public health facilities for IPD and OPD decreased with their increasing level [Table 1].

Factors affecting the health-seeking behaviour among the elderly

After adjusting for various covariates, the likelihood of seeking health care was 23% less in 80 years and above elderly when compared to other age groups. Additionally, a positive

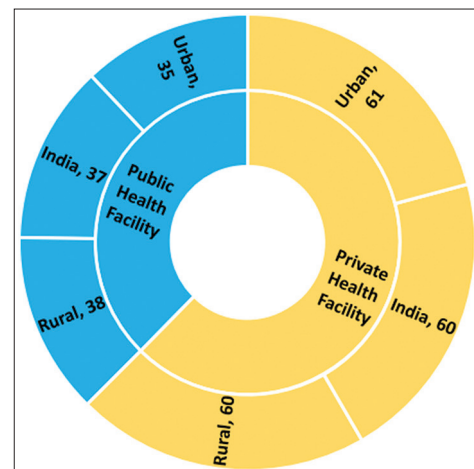


Figure 1: Percentage distribution of healthcare facility utilization

Table 1: Factors affecting the utilization of healthcare facility for IPD and OPD services

	IPD [#]		OPD [#]	
	OR (95% CI)	aOR* (95% CI)	OR (95% CI)	aOR* (95% CI)
Age in year				
60-69	1	1	1	1
70-79	1.06 (1.052-1.059)	0.74 (0.732-0.748)	0.95 (0.946-0.948)	1.11 (1.109-1.119)
80 & above	1.23 (1.226-1.236)	0.26 (0.257-0.266)	0.99 (0.996-0.999)	1.36 (1.354-1.371)
Residence				
Rural	1	1	1	1
Urban	0.81 (0.809-0.814)	1.06 (1.04-1.072)	0.69 (0.697-0.699)	1.48 (1.481-1.496)
Gender				
Male	1	1	1	1
Female	0.96 (0.961-0.966)	1.60 (1.586-1.618)	0.88 (0.879-0.881)	0.92 (0.920-0.929)
Education				
No schooling	1	1	1	1
Up to secondary	0.75 (0.756-0.761)	0.64 (0.637-0.650)	0.82 (0.828-0.830)	0.96 (0.965-0.964)
Higher secondary and above	0.25 (0.251-0.255)	0.24 (0.225-0.027)	0.37 (0.374-0.376)	0.28 (0.279-0.286)
Religion				
Hindu	1	1	1	1
Muslim	1.29 (1.289-1.299)	0.49 (0.486-0.504)	1.08 (1.087-1.091)	0.59 (0.590-0.599)
Christian	1.23 (1.229-1.248)	0.29 (0.243-0.255)	1.90 (1.895-1.908)	0.57 (0.562-0.577)
None	0.13 (.009-0.019)	-	0.57 (0.568-0.572)	0.67 (0.661-0.686)
Others ¹	1.48 (1.469-1.496)	-	0.87 (0.854-0.888)	-
Marital status				
Currently married	1	1	1	1
Widowed	1.12 (1.121-1.127)	1.6 (1.579-1.664)	1.19 (1.191-1.194)	0.78 (0.783-0.796)
Never married	0.96 (0.092-0.100)	-	1.40 (1.39-1.411)	0.23 (0.219-0.243)
Currently Employed status				
Currently working	1	1	1	1
Worked in the past but currently not working	0.89 (0.891-0.897)	1.02 (1.012-1.036)	0.99 (0.990-0.993)	1.35 (1.345-1.358)
Never worked	0.83 (0.826-0.833)	-	0.76 (0.766-0.768)	-
Pension ²				
Currently receiving	1	1	1	1
Expected to receive in future	1.17 (1.146-1.193)	-	2.24 (2.232-2.261)	0.24 (0.232-0.263)
Neither currently receiving nor expected	1.55 (1.543-1.563)	0.53 (0.518-0.546)	1.52 (1.522-1.530)	1.26 (1.245-1.274)
Health insurance ³				
No	1	1	1	1
Yes	1.34 (1.339-1.348)	1.82 (1.811-1.846)	1.51 (1.510-1.514)	1.07 (1.074-1.084)
MPCE quintile ⁴				
Poorest	1	1	1	1
Poorer	0.80 (0.805-0.813)	2.6 (2.600-2.681)	0.72 (0.723-0.726)	0.96 (0.960-0.972)
Middle	0.63 (0.636-0.642)	0.70 (0.690-0.710)	0.67 (0.677-0.679)	0.76 (0.760-0.770)
Richer	0.38 (0.387-0.391)	0.27 (0.271-0.281)	0.59 (0.596-0.598)	0.83 (0.832-0.843)
Richest	0.28 (0.283-0.285)	0.33 (0.331-0.341)	0.44 (0.445-0.447)	0.53 (0.526-0.534)

NOTE: Results was weighted as per weights provided by LASI (using national frequency weight). Health facility includes public and private (reference value) health facility. 1. Religion other includes Sikh, Buddhist/ neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, others. 2. Pension was estimated only for officially retired by work-related pension elderly. 3. Health insurance covers surgery; test; doctor's visits; medicines; dental care; in home care; hospitalization charge; other charges. 4. MPCE quintile is monthly per capita consumption expenditure. 5. OR is odds ratio, AOR is adjusted odds ratio. *Adjusted for living arrangements, caste, physical impairment, difficulty in walking, taking care of grandchildren, lack of food security, covered with medical reimbursement from employer, financial support received. [#]P>0.01

association was found between the elderly living in an urban area and seeking 38% more health care when compared to rural. The likelihood of seeking health care significantly increased with each increasing level of education and MPCE quintile. Regarding the role of marital status, widows were 57% more likely to seek health care when compared to married elderly. A negative association was observed between the elderly covered with HI and having 10% less likelihood of seeking health when compared to the elderly with no insurance coverage [Table 2].

Discussion

This paper attempted to analyse the public/private health facility utilization for IPD and OPD services along with HSB among the elderly. The bivariate analysis observed less utilization of public health facilities for IPD and OPD across all age groups, which was following the findings of the study irrespective of IPD/OPD, conducted among the elderly in Pakistan^[16] and concerning these services as well.^[17] Another study by Peltzer *et al.* among Indian elderly observed more

Table 2: Factors affecting the health-seeking behaviour among elderly

	Health-seeking behaviour			
	OR (95% CI)	P	aOR* (95% CI)	P
Age in year				
60-69	1		1	
70-79	1.04 (1.03-1.04)	0.001	1.30 (1.296-1.314)	0.004
80 and above	0.79 (0.795-0.798)	0.001	0.77 (0.765-0.777)	0.001
Residence				
Rural	1		1	
Urban	1.60 (1.598-1.604)	0.001	1.38 (1.371-1.393)	0.001
Gender				
Male	1		1	
Female	0.99 (0.995-0.998)	0.001	1.15 (1.149-1.165)	0.001
Education				
No schooling	1		1	
Up to secondary	1.44 (1.445-1.449)	0.001	1.26 (1.251-1.269)	0.001
Higher secondary and above	1.66 (1.662-1.674)	0.001	1.62 (1.596-1.654)	0.001
Religion				
Hindu	1		1	
Muslim	1.56 (1.562-1.571)	0.001	1.56 (1.562-1.571)	0.001
Christian	0.37 (0.373-0.375)	0.001	0.37 (0.372-0.375)	0.001
Others ¹	1.38 (1.769-1.793)	0.001	1.38 (1.377-1.389)	0.001
Marital status				
Currently married	1		1	
Widowed	0.84 (0.839-0.842)	0.001	1.57 (1.524-1.632)	0.001
Never married	0.46 (0.459-0.465)	0.001	-	-
Currently Employed status				
Currently working	1		1	0.001
Worked in the past but currently not working	1.20 (1.204-1.209)	0.001	0.71 (0.704-0.715)	0.001
Never worked	0.95 (0.957-0.961)	0.001	-	-
Pension ²				
Currently receiving	1		1	
Expected to receive in future	1.00 (0.997-1.016)	0.001	1 (-)	
Neither currently receiving nor expected	0.76 (0.758-0.764)	0.001	1.07 (1.055-1.092)	0.001
Health insurance ³				
No	1	0.001	1	
Yes	0.94 (0.945-0.949)	0.001	0.90 (0.898-0.910)	0.001
MPCE quintile ⁴				
Poorest	1		1	
Poorer	1.70 (1.702-1.709)	0.001	1.44 (1.429-1.452)	0.001
Middle	1.72 (1.723-1.730)	0.001	1.44 (1.432-1.456)	0.001
Richer	2.36 (2.359-2.370)	0.001	3.70 (3.660-3.741)	0.001
Richest	2.81 (2.803-2.818)	0.001	2.27 (2.250-2.297)	0.001

NOTE: Results was weighted as per weights provided by LASI (using national frequency weight). Health-seeking behaviour yes and no (reference). 1. Religion other includes Sikh, Buddhist/neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, others. 2. Pension was estimated only for officially retired by work-related pension elderly. 3. Health insurance covers surgery; test; doctor's visits; medicines; dental care; in home care; hospitalization charge; other charges. 4. MPCE quintile is monthly per capita consumption expenditure. 5. OR is odds ratio, aOR is adjusted odds ratio. *Adjusted for living arrangements, caste, physical impairment, difficulty in walking, taking care of grandchildren, lack of food security, covered with medical reimbursement from employer, financial support received

utilization of private health facilities.^[18] The current study further observed a similar trend of less utilization of public health facilities concerning different covariates. The utilization of public health facilities itself increased with age, and this result was similar to another study that compared utilization among the elderly (58%) and young adults (46%) in Albania.^[19] The multivariate analysis also observed less utilization of public health facilities for IPD and OPD services. Given this fact, utilization of public health facilities increased with age, and this finding was supported by a study done among the Chinese elderly that observed increased OPD services with

age, irrespective of the type of health facility.^[20] Seeing the demographic transition in India, our health system should act proactively to serve the elderly and meet their needs in terms of providing the best possible geriatric care at health facilities. GOI has released the operational guidelines for Elderly Care at HWC to strengthen healthcare services for the elderly at the primary level and enable a continuum of care to and from secondary and tertiary levels. Also, under the AB-HWC, an expanded package providing training to health cadres about specific need-based elderly services may further improve the utilization of public health facilities.

A significant difference was observed in more utilization of public health facilities for IPD and OPD in rural when compared to urban areas, the finding was further supported by the previous studies done among the Indian elderly that observed an overall 39% utilization in rural and 25% in urban areas.^[21] Interestingly, the result was reversed when adjusted for covariates, this could be because of the higher percentage of currently working and covered by HI^[22] in the rural area instead of urban, which may give financial independence to opt for health facility of their choice. A significant gender difference in utilizing the public health facility for both IPD and OPD services was observed. This observation was further confirmed by the study based on SAGE (Study on Global AGEing and adult health) data, which include multiple countries and showed females were significantly less likely to use inpatient services [OR: 0.8; 95% CI: 0.7–0.9] and more outpatient [OR: 1.2; 95% CI: 1.1–1.3] than men irrespective of facility opt.^[18] Another study among the Indian elderly showed lower health facility utilization for IPD and OPD in women because they reported fewer health problems in comparison to their male counterparts.^[23] Logistic regression established a strong association between increasing level of education and MPCE quintile with less utilization of public health facilities for both IPD and OPD services. This result was similar to the findings of previously conducted studies in the different settings of India and LMIC (Pakistan) among the same age group.^[16,24,25] These studies posit that with an increased level of education and MPCE quintile, utilization of public health facilities decreased. The elderly not covered by pension preferred to utilize the public-health facility for OPD and private for IPD services. Another study done in China among 50 to 70-year-old individuals, observed a significant influence of pension coverage on increased IPD services utilization; however, OPD services remained unaffected.^[26] This may be the possible explanation for preferring private facilities for IPD services. HI also affected the utilization of health facilities; those who were covered preferred to utilize public health facilities for both OPD and IPD services. There were previous studies^[20,22] that established the fact that HI coverage enhanced the health facility utilization for both services. Another study done in Vietnam showed a positive association between HI coverage and increased public health facility utilization.^[27]

The study further observed that HSB decreased with age. In logistic regression, the highest HSB was observed for aged 70–79 years and the least for 80 years and above. A study conducted among the Indian elderly stated that 30%^[28] did not seek healthcare because the elderly believe their health problem was an age-related phenomenon.^[24,28] HSB was significantly more in urban, among females, with an increasing level of education and MPCE quintile. It was the highest in educated and richest elderly when compared to their counterparts. These results were as per the previous studies done in India^[25] and Pakistan^[29] that stated the positive association with defined covariates. Significantly, more HSB was observed in widowed when compared to married, and this result was per another study done among Indian elderly widowers.^[30] HI coverage showed a

negative association with HSB, whereas non-coverage of pension showed a positive association. Both findings were contradicting the associations established by the previous studies^[22] and stated that the HI and pension coverage positively influenced HSB. A positive association may depend on the type and amount of coverage that needs to be explored further, but this was not the objective of the study.

Limitations and strengths

The strength of the current study was the data used to pursue the study were national-level survey data. Results presented here were weighted for the national level and hence generalized. However, the present study was based on secondary data; hence all limitations of the secondary data studies hold in this study as well. How the HI coverage affects the utilization and HSB could not be explored more because its coverage in the original data was low, further factors that may influence it were not captured in the original data.

Conclusion

The current study reported less utilization of public health facilities in comparison to private across all age groups of the elderly. However, public health facility utilization itself increases with the age of the elderly. HSB decreased with age, and was maximum in 60–69 years and observed less in 80 years and above elderly. HI coverage enhanced the public-health utilization among the elderly, this gives a ray of hope that insurance programs/services provided by GOI such as PM-JAY may influence healthy aging in the long run. There might be a chance that more utilization of public health facilities by the poorest among all age groups was influenced by PMJAY (or any other insurance) that covers the bottom 40% of the Indian population.

Acknowledgments

We thank the IIPS, Mumbai, for providing the data for this study.

Ethical approval

The present study was based on LASI data that were available for use after requesting the data from International Institute for Population Sciences (IIPS). The data were obtained through proper channels, and permission was taken to use it for further analysis to overcome any propriety issues. A form and proposal were submitted for the data that were later accepted by the IIPS, and data were provided over email by them. The data were confidential and did not include any identifiable information of survey participants.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. WHO. Ageing and health [Internet]. 2018. [Last accessed on 2021 Jun 10].
2. HelpAge India. State-Elderly-India-2014.pdf. [Internet]. 2015.
3. United Nations, Department of Economic and Social Affairs PD. World Population Prospects: The 2015 Revision [Internet]. Vol. XXXIII, United Nations Economic and Social Affairs. 2015. p. 1-66. [Last accessed on 2021 Jun 10].
4. United Nations Population Fund. Caring for Our Elders : Early Responses India Ageing Report 2017 [Internet]. Vol. 33, United Nations Population Fund (UNFPA). 2017. [Last accessed on 2021 Jun 10].
5. MoHFW National commission of Population. Census of India 2011: Population projections for India and states 2011-2036, Report of the technical group on population projections [Internet]. 2020 [Last accessed on 2021 Jun 10].
6. Parant A. [World population prospects]. *Futuribles* (Paris, France : 1981) [Internet]. 1990. p. 49-78.
7. Ministry of Statistics and programme Implementation National Statistical Office. Health in India, NSS 75th Round [Internet]. Mospi; 2020. [Last accessed on 2021 Jul 08].
8. Joe W, Rudra S, Subramanian SV. Horizontal inequity in elderly health care utilization: Evidence from India. *J Korean Med Sci* 2015;30:155-66.
9. FICCI. Ensuring care for the golden years - Way forward for India. In: 7th Annual Health Insurance Conference [Internet]. 2014. p. 40. [Last accessed on 2021 Jun 11].
10. Mane AB. Ageing in India: Some Social Challenges to Elderly Care. 2016. [Last accessed on 2021 Jun 11].
11. Nath A, Ingle G. Geriatric health in India: Concerns and solutions. *Indian J Community Med* 2008;33:214-8.
12. Ministry of Health & Family Welfare. Detailed bried of NPHCE Background [Internet]. [Last accessed on 2021 Jun 14].
13. Ministry of Health and Family Welfare, National Health System and Resource Centre, Government of India. AYUSHMAN BHARAT Comprehensive Primary Health Care through Health and Wellness Centers Operational Guidelines. 2018.
14. Ministry of Health and Family Welfare. Operational guideline for elderly care at health and wellness centres [Internet]. 2021. [Last accessed on 2021 Aug 10].
15. International Institute for Population Sciences (IIPS). Longitudinal Ageing Study in India (LASI): India Report 2020 [Internet]. Delhi; 2021.
16. Naz I, Ghimire U, Zainab A. Behavioral factors associated with utilization of healthcare services among elderly in Pakistan: Evidence from a nationally representative survey. *BMC Geriatr* 2021;21:1-11.
17. Ranjan A, Muraleedharan VR. Equity and elderly health in India: Reflections from 75th round National Sample Survey, 2017-18, amidst the COVID-19 pandemic. *Globalization Health* 2020;16:1-16.
18. Peltzer K, Williams JS, Kowal P, Negin J, Snodgrass JJ, Yawson A, *et al.* Universal health coverage in emerging economies: Findings on health care utilization by older adults in China, Ghana, India, Mexico, the Russian Federation, and South Africa. *Global Health Action* 2014;7:1-9.
19. Gabrani J, Schindler C, Wyss K. Health seeking behavior among adults and elderly with chronic health condition (s) in Albania. *Front Public Health* 2021;9:616014.
20. Mao W, Zhang Y, Xu L, Miao Z, Dong D, Tang S. Does health insurance impact health service utilization among older adults in urban China? A nationwide cross-sectional study. *BMC Health Serv Res* 2020;20:1-9.
21. Chauhan S, Kumar S. Urban-rural differential in Hypertension and Diabetes among Elderly in India: A study of prevalence, factors, and treatment-seeking. 2021. [Last accessed on 2021 Jul 10].
22. Ngwira A, Hangoma P. The wedge between need and access to healthcare: Does health insurance improve utilization for people with non- communicable diseases? 2021 May 20. [Last accessed on 2021 Aug 02].
23. Roy K, Chaudhuri A. Influence of socioeconomic status, wealth and financial empowerment on gender differences in health and healthcare utilization in later life: Evidence from India. *Soc Sci Med* 2008;66:1951-62.
24. Panicker PR, J D. PJ. Utilization of healthcare facilities and associated factors among rural elderly in Kanyakumari District, Tamil Nadu. *Int J Public Health Res* 2019;6:1-8.
25. Banerjee S. Determinants of rural-urban differential in healthcare utilization among the elderly population in India. *BMC Public Health* 2021;21:939.
26. Chen S, Chen X, Law S, Lucas H, Tang S, Long Q, *et al.* How and to what extent can pensions facilitate increased use of health services by older people: Evidence from social pension expansion in rural China. *BMC Health Serv Res* 2020;20:1008.
27. Thuong NTT. Impact of health insurance on healthcare utilisation patterns in Vietnam: A survey-based analysis with propensity score matching method. *BMJ Open* 2020;10:e040062.
28. Patel S, Rathore B, Niranjana A, Rathore I. To assess the health seeking behaviour among elderly people in Bhopal. *Int J Health Clin Res* 2021.
29. Ladha A, Khan RS, Malik AA, Khan SF, Khan B, Khan IN, *et al.* The health seeking behaviour of elderly population in a poor-urban community of Karachi, Pakistan. *J Pak Med Assoc* 2009;59:89-92.
30. Agrawal G, Keshri K. Morbidity patterns and health care seeking behavior among older widows in India. *PLoS One* 2014;9:94295.

Supplementary files

Characteristics	India					
	Rural			Urban		
	Male	Female	Total	Male	Female	Total
	Number per hundred thousand (Percentage)					
Age in years						
60-69	237.5 (58.2)	255.7 (59.0)	493.2 (58.6)	90.0 (56.9)	115.2 (60.0)	205.2 (58.4)
70-79	123.7 (30.3)	126.9 (29.3)	250.6 (29.8)	52.7 (33.3)	57.1 (29.6)	109.8 (31.2)
80 Plus	46.9 (11.5)	51.3 (11.8)	98.2 (11.7)	15.6 (9.9)	21.0 (10.9)	36.6 (10.4)
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)
Education						
No schooling	187.8 (46.0)	367.1 (84.6)	554.9 (65.9)	30.8 (19.5)	88.9 (46.1)	119.7 (34.1)
Less than primary	64.5 (15.8)	30.1 (7.0)	94.6 (11.2)	17.7 (11.2)	24.1 (12.5)	41.9 (12.0)
Up to middle	99.0 (24.3)	30.2 (7.1)	129.2 (15.4)	37.6 (23.7)	46.0 (23.8)	83.6 (23.8)
Secondary schooling	31.4 (7.7)	4.2 (1.1)	35.6 (4.2)	32.0 (20.2)	18.9 (9.8)	50.9 (14.5)
Higher secondary or similar	13.6 (3.3)	1.7 (0.4)	15.4 (1.8)	16.9 (10.7)	7.8 (4.0)	24.7 (7.0)
College and above	9.1 (2.2)	0.4 (0.1)	9.5 (1.1)	18.2 (11.5)	6.0 (3.1)	24.3 (7.0)
Professional course/degree	2.7 (0.7)	0.1 (0.0)	2.8 (0.3)	5.0 (3.1)	1.5 (0.8)	6.5 (1.8)
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)
Religion						
Hindu	341.5 (83.7)	361.7 (83.4)	703.2 (83.5)	123.1 (77.8)	155.03,689 (80.2)	278.2 (79.1)
Muslim	40.2 (9.9)	41.9 (9.8)	82.1 (9.8)	26.1 (16.5)	26.4 (13.6)	52.5 (14.9)
Christian	11.2 (2.8)	14.1 (3.3)	25.3 (3.0)	3.3 (2.1)	5.5 (2.8)	8.8 (2.5)
Sikh	9.1 (2.2)	9.5 (2.2)	18.6 (2.2)	2.3 (1.5)	2.4 (1.2)	4.7 (1.3)
Other ¹	5.5 (1.4)	6.2 (1.4)	11.7 (1.4)	3.3 (2.1)	3.9 (2.0)	7.2 (2.1)
None	0.5 (0.1)	0.5 (0.1)	1.1 (0.1)	0.1 (0.0)	0.2 (0.1)	0.2 (0.1)
Missing	0	0 (0.0)	0 (0.0)	-	-	-
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)
Marital status						
Currently married	328.7 (80.5)	200.2 (46.1)	528.9 (62.8)	130.6 (82.5)	76.1 (39.4)	206.7 (58.8)
Widowed	69.2 (17.1)	226.6 (52.2)	295.8 (35.1)	24.2 (15.3)	112.1 (58.1)	136.2 (38.8)
Never married	4.8 (1.2)	0.9 (0.2)	5.7 (0.7)	1.2 (0.8)	1.6 (0.8)	2.8 (0.8)
Other ²	5.4 (1.3)	6.2 (1.4)	11.6 (1.4)	2.3 (1.5)	3.5 (1.8)	5.8 (1.6)
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)
Current work status						
Currently working	197.6 (48.4)	100.7 (23.2)	298.2 (35.4)	50.5 (32.0)	18.4 (9.5)	68.9 (19.6)
Worked in the past but currently not working	194.2 (47.6)	162.3 (37.4)	356.5 (42.3)	102.4 (64.7)	52.0 (27.0)	154.5 (44.0)
Never worked	16.3 (4.0)	170.8 (39.4)	187.2 (22.2)	5.2 (3.3)	122.8 (63.5)	128.0 (36.4)
Working status missing	0	0.1 (0.0)	0.1 (0.0)	0.1 (0.1)	0 (0.0)	0.2 (0.1)
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)
Gender						
Male	327.5 (57.8)	370.9 (59.1)	698.4 (58.5)	327.5 (57.8)	370.9 (59.1)	698.4 (58.5)
Female	176.4 (31.1)	184.0 (29.4)	360.4 (30.2)	176.4 (31.1)	184.0 (29.4)	360.4 (30.2)
Total	62.5 (11.0)	72.3 (11.5)	134.8 (11.3)	62.5 (11.0)	72.3 (11.5)	134.8 (11.3)
Total	566.4 (100)	627.2 (100)	1193.5 (100)	566.4 (100)	627.2 (100)	1193.5 (100)

Contd...

Table 1a: Contd...

Characteristics	Rural			Urban			India		
	Number per hundred thousand			Number per hundred thousand (Percentage)			Number per hundred thousand (Percentage)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total Pension ³	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)	566.4 (100)	627.2 (100)	1193.5 (100)
Currently receiving	27.1 (15.1)	3.1 (3.6)	30.2 (11.3)	32.3 (43.1)	5.2 (25.2)	37.5 (39.2)	59.4 (23.2)	8.3 (7.8)	67.7 (18.7)
Expected to receive in future	5.2 (2.9)	2.4 (2.9)	7.6 (2.9)	2.7 (3.6)	0.7 (3.3)	3.3 (3.5)	7.8 (3.1)	3.1 (3.0)	11.0 (3.0)
Neither currently receiving nor expected	148.8 (82.2)	79.8 (93.6)	228.6 (85.8)	39.9 (53.3)	14.9 (71.6)	54.8 (57.3)	188.7 (73.7)	94.7 (89.2)	283.4 (78.3)
Total	181.1 (100)	85.3 (100)	266.4 (100)	74.8 (100)	20.8 (100)	95.6 (100)	255.9 (100)	106.1 (100)	362.0 (100)
Health insurance ⁴									
No	335.4 (82.2)	366.7 (84.5)	702.1 (83.4)	129.1 (81.6)	167.0 (86.4)	296.1 (84.2)	464.5 (82.0)	533.7 (85.1)	998.2 (83.6)
Yes	72.7 (17.8)	67.2 (15.5)	139.9 (16.6)	29.2 (18.5)	26.2 (13.6)	55.4 (15.8)	101.9 (18.1)	93.4 (15.0)	195.3 (16.4)
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.8 (100)	193.3 (100)	351.6 (100)	566.4 (100)	627.2 (100)	1193.5 (100)
MPCE quintile ⁵									
Poorest	82.4 (20.2)	98.2 (22.6)	180.6 (21.5)	35.6 (22.5)	42.8 (22.2)	78.4 (22.3)	118.0 (20.8)	141.1 (22.5)	259.1 (21.7)
Poorer	89.6 (22.1)	97.6 (22.5)	187.2 (22.2)	31.2 (19.7)	40.8 (21.1)	71.9 (20.5)	120.8 (21.3)	138.4 (22.1)	259.1 (21.7)
Middle	85.6 (21.1)	92.1 (21.2)	177.7 (21.1)	36.7 (23.2)	35.5 (18.4)	72.3 (20.5)	122.4 (21.6)	127.6 (20.4)	250.0 (21.1)
Richer	79.4 (10.5)	80.3 (18.5)	159.7 (19.1)	29.4 (18.6)	39.9 (20.6)	69.3 (19.7)	108.9 (19.2)	120.2 (19.2)	229.1 (19.2)
Richest	71.1 (17.4)	65.6 (15.1)	136.7 (16.2)	25.4 (16.0)	34.3 (17.7)	59.6 (17.1)	96.4 (17.0)	99.9 (15.9)	196.3 (16.5)
Total	408.1 (100)	433.9 (100)	842.0 (100)	158.3 (100)	193.3 (100)	351.6 (100)	566.4 (100)	627.2 (100)	1193.5 (100)

NOTE: all values round off up to 1 decimal, and weighted as per weights provided by LASI (using national frequency weight). 1. Religion other includes Buddhist/neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, others. 2. Others in Marital Status includes Divorced, Separated, Deserted, Live in Relationship. 3. Pension was estimated only for officially retired by work-related pension elderly. 4. Health insurance covers surgery; test; doctor's visits; medicines; dental care; in home care; hospitalization charge; other charges. 5. MPCE quintile is monthly per capita consumption expenditure

Table 2b: Distribution of health facility utilization for In-patient care among elderly population

Age in years	In patient care in last one year by health facility types												Total Number			
	60-69 yr.: Number per ten hundred thousand (percentage)				70-79 yr.: Number per ten hundred thousand (percentage)				80 plus yr.: Number per ten hundred thousand (percentage)							
	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total				
Residence																
Rural	132.7 (37.5)	212.0 (60.1)	8.8 (2.5)	353.5 (100)	89.8 (43.1)	112.8 (54.1)	5.9 (2.8)	208.5 (100)	32.9 (38.4)	51.7 (60.4)	1.0 (1.1)	85.6 (100)	647.6			
Urban	55.9 (34.7)	97.4 (60.6)	7.6 (4.7)	160.9 (100)	31.6 (28.3)	76.0 (68.1)	4.0 (3.6)	111.6 (100)	14.0 (50.0)	10.9 (38.7)	3.2 (11.3)	28.1 (100)	300.6			
Gender																
Male	98.9 (37.6)	155.3 (59.1)	8.7 (3.3)	262.9 (100)	55.4 (37.0)	90.4 (60.4)	3.9 (2.6)	149.6 (100)	25.4 (43.1)	31.4 (53.4)	2.1 (3.5)	58.8 (100)	471.4			
Female	89.6 (35.6)	154.2 (61.3)	7.7 (3.1)	251.5 (100)	660,382 (38.7)	98.4 (57.7)	6.1 (3.6)	170.5 (100)	21.6 (39.4)	31.2 (56.8)	2.1 (3.8)	54.8 (100)	476.8			
Education																
No Schooling	109.3 (42.4)	144.9 (56.2)	3.7 (1.4)	257.8 (100)	78.6 (44.5)	94.5 (53.5)	3.6 (2.0)	176.7 (100)	25.5 (37.1)	41.0 (59.7)	2.2 (3.2)	68.7 (100)	514.4 (60-69)			
Less than Primary	29.0 (42.4)	37.4 (54.6)	2.1 (3.1)	68.6 (100)	16.5 (31.1)	33.9 (63.9)	2.7 (5.0)	53.1 (100)	7.0 (55.5)	5.6 (44.5)	0.0 (0)	12.7 (100)	320.2 (70-79)			
Up to middle	36.5 (33.4)	64.6 (59.3)	8.0 (7.3)	109.1 (100)	17.6 (34.3)	31.7 (61.5)	2.2 (4.2)	51.5 (100)	13.9 (56.1)	10.7 (43.1)	0.1 (0.9)	24.8 (100)	113.7 (80+)			
Secondary	9.5 (21.8)	32.3 (74.3)	1.7 (3.9)	43.5 (100)	4.1 (22.3)	12.9 (70.1)	1.5 (8.1)	18.6 (100)	0.1 (3.0)	3.3 (94.7)	836 (2.4)	3.5 (100)				
Higher Secondary or similar	2.3 (11.4)	17.2 (86.33)	0.5 (2.3)	19.9 (100)	3.1 (27.2)	8.4 (72.8)	0 (0.0)	11.5 (100)	0 (1.8)	1.0 (37.3)	1.6 (61.0)	2.6 (100)				
College and above	2.0 (14.3)	11.3 (81.9)	0.5 (3.9)	13.8 (100)	0.8 (12.8)	5.3 (87.2)	0	6.1 (100)	0.4 (29.8)	0.9 (70.2)	0	1.2 (100)				
Professional course/degree	0	1.7 (100)	0	1.7 (100)	0.7 (24.6)	2.1 (74.9)	0 (0.6)	2.8 (100)	0	0.1 (100)	0	0.1 (100)				
Religion																
Hindu	146.7 (36.0)	248.9 (61.1)	11.9 (3.0)	407.5 (100)	90.7 (36.3)	149.7 (60.1)	9.3 (3.7)	249.7 (100)	37.1 (41.3)	49.2 (54.8)	3.6 (4.1)	89.9 (100)	514.4 (60-69yr)			
Muslim	27.1 (40.5)	36.1 (53.9)	3.8 (5.7)	67.1 (100)	23.7 (47.3)	26.4 (52.7)	0	50.1	6.9 (40.3)	10.2 (59.7)	0	17.0 (100)	320.2 (70-79yr)			
Christian	7.4 (51.0)	7.1 (49.0)	0.0 (0.1)	14.4 (100)	3.2 (32.1)	6.7 (67.3)	0.1 (0.5)	9.9	0.9 (40.8)	1.4 (59.2)	0	2.3 (100)	113.7 (80+)			
Sikh	2.8 (19.6)	10.9 (76.4)	0.6 (4.0)	14.2 (100)	1.4 (33.1)	2.3 (53.3)	0.6 (13.6)	4.3 (100)	0	1.8 (76.1)	0.6 (23.9)	2.4 (100)				
Other ⁴	4.5 (42.1)	6.1 (56.6)	0.2 (1.4)	10.7 (100)	2.5 (39.2)	3.8 (60.7)	0	6.3 (100)	2.0 (99.5)	0 (0.5)	0	2.0 (100)				
None	0 (0.8)	0.4 (99.2)	0 (0)	0.4 (100)	-	-	-	-	-	-	-	-				
Marital status																
Currently Married	140.4 (35.8)	241.4 (61.5)	10.4 (2.7)	392.3 (100)	63.8 (36.8)	103.1 (59.4)	6.6 (3.8)	173.5 (100)	20.6 (48.6)	21.5 (51.0)	0.2 (0.5)	42.3 (100)	514.4 (60-69)			
Widowed	47.4 (40.6)	63.5 (54.3)	6.0 (5.1)	116.9 (100)	56.8 (39.4)	84.4 (58.6)	2.9 (2.1)	144.0 (100)	26.1 (36.9)	40.7 (57.6)	3.9 (5.6)	70.8 (100)	320.2 (70-79)			
Never Married	0.2 (8.6)	2.5 (91.4)	0	2.7 (100)	0	1.1 (100)	0	1.1	0	0.3 (100)	0	0.3 (100)	113.7 (80+)			
Other ⁵	0.5 (18.6)	2.0 (81.4)	0	2.5 (100)	0.9 (60.5)	0.1 (6.4)	0.5 (33.1)	1.4 (100)	0.3 (96.8)	0 (0)	0 (3.2)	0.3 (100)				
Currently Employed Status																
Currently working	64.6 (40.5)	89.8 (56.3)	5.0 (3.1)	159.5 (100)	20.7 (40.2)	28.3 (55.1)	2.4 (4.7)	51.4 (100)	1.5 (22.7)	5.1 (77.3)	0	6.5 (100)	514.4 (60-69)			
Worked in the past but currently not working	89.3 (36.3)	151.1 (61.4)	5.8 (2.4)	246.1 (100)	66.0 (36.2)	113.1 (62.0)	3.2 (1.8)	182.3 (100)	38.8 (45.0)	43.6 (50.6)	3.8 (4.4)	86.2 (100)	320.2 (70-79)			
Never Worked	34.6 (31.8)	68.5 (63.1)	5.6 (5.2)	108.8 (100)	34.8 (40.2)	47.4 (54.8)	4.3 (5.1)	86.5 (100)	6.6 (31.5)	13.9 (67.0)	0.3 (1.5)	20.8 (100)	113.7 (80+)			
Pension ⁶																
Currently receiving	5.0 (18.6)	20.9 (77.6)	1.0 (3.8)	26.9 (100)	3.6 (16.1)	18.3 (81.6)	0.5 (2.4)	22.4 (100)	8.2 (80.3)	1.9 (18.9)	0.1 (0.8)	10.2 (100)	157.6 (60-69)			
Expected to receive in future	1.4 (33.7)	2.8 (66.3)	0	4.2 (100)	0.1 (6.0)	0.4 (24.1)	1.1 (70.0)	1.6 (100)	-	-	-	-	70.7 (70-79)			
Neither currently receiving nor expected	50.7 (40.1)	71.2 (56.3)	4.5 (3.6)	126.4 (100)	16.8 (36.1)	29.0 (62.3)	0.8 (1.8)	46.6 (100)	1.6 (47.9)	8.7 (84.1)	0	10.4 (100)	20.6 (80+)			
Health Insurance ⁷																

Contid...

Table 2b: Contd...

Age in years	In patient care in last one year by health facility types												Total Number
	60-69 yr.: Number per ten hundred thousand (percentage)			70-79 yr.: Number per ten hundred thousand (percentage)			80 plus yr.: Number per ten hundred thousand (percentage)			Total			
	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total	
No	141.9 (36.9)	233.7 (60.7)	9.6 (2.5)	385.2 (100)	88.0 (35.1)	155.7 (62.0)	7.8 (3.1)	251.5 (100)	37.5 (37.0)	59.5 (58.9)	4.1 (4.1)	101.1 (100)	514.4 (60-69)
Yes	46.6 (36.1)	75.8 (58.7)	6.8 (5.3)	129.2 (100)	33.5 (48.7)	33.0 (48.1)	2.2 (3.2)	68.7 (100)	9.5 (75.7)	3.0 (24.3)	0 (.1)	12.5 (100)	320.2 (70-79)
MPCE quintile ⁸													113.7 (80+)
Poorest	41.5 (50.8)	36.3 (44.4)	3.9 (4.8)	81.7 (100)	22.1 (52.1)	19.0 (45.0)	1.3 (3.1)	42.3 (100)	9.8 (61.6)	5.8 (36.9)	0.2 (1.5)	15.9 (100)	514.4 (60-69)
Poorer	44.9 (45.6)	51.4 (52.3)	2.1 (2.1)	98.4 (100)	24.2 (44.36)	29.9 (54.8)	0.4 (.8)	54.5 (100)	17.0 (70.0)	7.3 (30.0)	0 (.0)	24.3 (100)	320.2 (70-79)
Middle	40.5 (43.8)	50.2 (54.2)	1.8 (2.1)	92.5 (100)	24.0 (38.1)	35.1 (55.5)	4.1 (6.5)	63.3 (100)	9.7 (45.8)	11.4 (54.2)	0	21.1 (100)	113.7 (80+)
Richer	27.1 (30.0)	60.0 (66.3)	3.4 (3.8)	90.5 (100)	26.4 (35.0)	48.7 (64.4)	0.5 (.7)	75.6 (100)	6.2 (24.2)	19.1 (75.0)	0.2 (.8)	25.4 (100)	
Richest	34.5 (22.8)	111.6 (73.8)	5.1 (3.4)	151.2 (100)	24.8 (29.4)	56.1 (66.4)	3.6 (4.3)	84.5 (100)	4.4 (16.2)	19.0 (70.2)	3.7 (13.6)	27.0 (100)	
India	188.5 (36.7)	309.4 (60.2)	16.4 (3.2)	514.4 (100)	121.4 (37.9)	188.8 (59.1)	9.9 (3.1)	320.2 (100)	46.9 (41.3)	62.6 (55.1)	4.1 (3.6)	113.7 (100)	948.2

NOTE: all values round off up to 1 decimal, and weighted as per weights provided by LASI (using national frequency weight). 1. Public facilities include private hospital/Nursing home and NGO/Charity/Trust/Church-run hospital. 2. Private facilities include government facilities. 3. Others health facility include Private (partial) and Government (partial)/NGO (partial). 4. Religion other includes Buddhist/neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, others. 5. Others in Marital Status includes Divorced, Separated, Deserted, Live in Relationship. 6. Pension was estimated only for officially retired by work-related pension elderly. 7. Health insurance covers surgery; test; doctor's visits; medicines; dental care; in home care; hospitalization charge; other charges. 8. MPCE quintile is monthly per capita consumption expenditure

Table 3c: Distribution of health facility utilization for out-patient care among elderly population

Age in years	Out-patient care in last one year by health facility types												Total Number			
	60-69 yr.: Frequency (percentage)				70-79 yr.: Frequency (percentage)				80 plus yr.: Frequency (percentage)							
	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total				
Residence																
Rural	707.5 (23.9)	1792.1 (60.6)	458.9 (15.5)	2958.5 (100)	359.0 (24.1)	892.9 (60.0)	246.2 (16.4)	1498.1 (100)	134.2 (24.3)	307.5 (55.6)	111.0 (20.1)	552.7 (100)	5009.3			
Urban	245.3 (21.5)	801.4 (70.4)	92.0 (8.1)	1138.6 (100)	132.8 (18.8)	521.4 (73.6)	54.2 (7.7)	708.4 (100)	37.8 (17.6)	161.7 (75.3)	15.2 (7.1)	214.6 (100)	2061.6			
Gender																
Male	456.4 (24.6)	1149.0 (62.1)	249.4 (13.5)	1854.7 (100)	244.1 (23.1)	661.4 (62.6)	150.4 (14.2)	1055.9 (100)	85.1 (23.0)	223.6 (60.5)	61.2 (16.5)	369.9 (100)	3280.5			
Female	496.4 (22.1)	1444.6 (64.4)	301.4 (13.4)	2242.4 (100)	247.8 (21.5)	752.8 (65.4)	150.0 (13.0)	1150.6 (100)	86.9 (21.9)	245.5 (61.8)	65.0 (16.4)	397.4 (100)	3790.4			
Education																
No Schooling	539.2 (24.2)	1331.0 (59.8)	354.2 (15.9)	2224.4 (100)	303.1 (24.4)	737.5 (59.3)	202.5 (16.3)	1243.1 (100)	118.0 (24.2)	270.7 (55.6)	98.2 (20.2)	487.0 (100)	4097.1			
Less than Primary	126.9 (27.9)	273.6 (60.2)	53.7 (11.8)	454.2 (100)	65.7 (23.0)	193.3 (67.7)	26.6 (9.3)	285.6 (100)	30.6 (28.1)	64.7 (59.5)	13.5 (12.4)	108.7 (100)	(60-69)			
Up to middle	196.8 (23.9)	543.2 (65.9)	84.6 (10.3)	824.6 (100)	83.3 (23.6)	229.8 (65.1)	39.7 (11.3)	352.7 (100)	18.7 (18.3)	72.1 (70.5)	11.5 (11.2)	102.3 (100)	2206.5			
Secondary Schooling	52.2 (17.9)	207.7 (71.4)	31.2 (10.7)	291.1 (100)	21.7 (12.0)	146.6 (80.6)	13.7 (7.5)	182.0 (100)	1.5 (5.8)	23.2 (88.0)	1.7 (6.3)	26.4 (100)	(70-79)			
Higher Secondary or similar	17.8 (12.3)	115.0 (79.7)	11.5 (8.1)	144.3 (100)	9.7 (16.1)	48.2 (79.5)	2.8 (5.6)	60.7 (100)	1.3 (19.0)	12.4 (85.1)	0.8 (5.8)	14.5 (100)	767.3			
College and above	18.1 (14.1)	99.7 (77.4)	11.0 (8.5)	128.8 (100)	5.9 (9.5)	42.1 (67.8)	14.2 (22.8)	62.2 (100)	1.6 (6.3)	22.6 (91.5)	0.5 (2.2)	24.7 (100)	(80+)			
Professional course/ degree																
Professional course/ degree	1.9 (6.4)	23.3 (78.0)	4.6 (15.6)	29.8 (100)	2.6 (12.8)	16.8 (82.8)	0.9 (4.4)	20.3 (100)	0.3 (7.1)	3.4 (93.0)	0	3.7 (100)				
Religion																
Hindu	765.8 (23.0)	2113.6 (63.5)	449.3 (13.5)	3328.7 (100)	404.1 (22.2)	1169.7 (64.2)	247.6 (13.6)	1821.4 (100)	137.9 (22.2)	376.6 (60.5)	107.7 (17.3)	622.2 (100)	40971.1			
Muslim	1,309,487 (26.1)	304.3 (60.7)	66.0 (13.2)	501.2 (100)	50.0 (20.1)	167.5 (67.3)	31.4 (12.6)	248.9 (100)	25.6 (27.1)	58.8 (62.3)	10.0 (10.6)	94.4 (100)	(60-69)			
Christian	341,009 (35.7)	56.9 (59.7)	4.4 (4.6)	95.4 (100)	23.8 (48.2)	22.5 (45.6)	3.1 (6.2)	49.3 (100)	4.2 (23.2)	11.9 (66.2)	1.9 (10.6)	18.0 (100)	2206.5			
Sikh	129,356 (12.8)	63.5 (62.8)	24.7 (24.4)	101.1 (100)	8.5 (15.7)	29.4 (54.5)	16.1 (29.9)	54.0 (100)	1.5 (7.4)	13.4 (67.2)	5.1 (25.4)	19.9 (100)	(70-79)			
Other ⁴	84,453 (12.7)	52.2 (78.6)	5.8 (8.7)	66.4 (100)	4.8 (15.4)	24.4 (78.4)	1.9 (6.2)	31.1 (100)	2.8 (24.1)	7.9 (67.4)	1.0 (8.6)	11.8 (100)	767.3			
None	0.6 (13.3)	3.0 (71.1)	0.7 (15.5)	4.3 (100)	0.8 (46.1)	0.7 (44.0)	0.2 (10.1)	1.7 (100)	0	0.5 (50.9)	0.5 (49.1)	1.0 (100)	(80+)			
Currently Employed																
Currently working	387.0 (23.8)	993.8 (61.0)	247.9 (15.2)	1628.8 (100)	96.0 (21.7)	275.9 (62.4)	70.1 (15.9)	441.9 (100)	15.9 (30.6)	19.6 (37.7)	16.5 (31.7)	51.9 (100)	4097.1			
Worked in the past but currently not working	358.7 (24.3)	953.2 (64.6)	163.8 (11.1)	1475.7 (100)	290.0 (25.1)	708.9 (61.1)	161.5 (13.9)	1160.4 (100)	108.9 (21.7)	312.0 (62.1)	81.8 (16.3)	502.8 (100)	(60-69)			
Never Worked	207.1 (20.7)	646.5 (65.1)	139.1 (14.0)	992.6 (100)	105.9 (17.6)	428.2 (71.0)	68.8 (11.4)	602.9 (100)	47.1 (22.1)	137.6 (64.7)	27.9 (13.1)	212.5 (100)	22,06.5			
Marital status																
Currently Married	623.2 (21.5)	1898.5 (65.4)	381.8 (13.2)	2903.6 (100)	257.6 (22.1)	745.5 (63.8)	164.9 (14.1)	1168.0 (100)	61.9 (22.5)	172.5 (62.6)	40.9 (14.9)	275.3 (100)	4097.1			
Widowed	304.9 (27.5)	643.3 (58.0)	162.2 (14.6)	1110.4 (100)	221.2 (22.1)	648.2 (64.8)	130.8 (13.1)	1000.2 (100)	104.7 (22.0)	288.4 (60.6)	82.8 (17.4)	475.9 (100)	(60-69)			
Never Married	8.8 (29.8)	16.3 (55.4)	4.4 (14.8)	29.5 (100)	4.6 (32.2)	8.3 (57.7)	1.5 (10.1)	14.4 (100)	0.9 (11.3)	5.8 (75.6)	1.0 (13.1)	7.6 (100)	2206.5			
Other ⁵	15.9 (29.6)	35.3 (65.8)	2.5 (4.6)	53.7 (100)	8.5 (35.6)	12.2 (51.1)	3.2 (13.5)	23.9 (100)	4.5 (52.71)	2.6 (30.2)	1.5 (17.1)	8.5 (100)	(70-79)			
Pension ⁶																
																(80+)

Contid...

Table 3c: Contd...

Age in years	Out-patient care in last one year by health facility types												Total Number
	60-69 yr.: Frequency (percentage)				70-79 yr.: Frequency (percentage)				80 plus yr.: Frequency (percentage)				
	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total	Public ¹	Private ²	Other ³	Total	
Characteristics													
Currently receiving	41.2 (19.2)	147.6 (70.2)	21.5 (10.2)	210.3 (100)	23.2 (15.4)	113.8 (75.7)	13.4 (9.0)	150.4 (100)	6.8 (14.1)	39.2 (82.0)	1.9 (4.1)	47.8 (100)	1521.8 (60-69)
Expected to receive in future	11.9 (26.0)	27.3 (59.5)	6.7 (14.6)	45.8 (100)	4.8 (50.1)	4.2 (43.4)	0.6 (6.5)	9.6	413 (100)	0	0	0 (100)	555.7 (70-79)
Neither currently receiving nor expected	279.6 (22.1)	776.7 (61.4)	209.3 (16.5)	1265.6 (100)	84.2 (21.3)	244.2 (61.7)	67.3 (17.0)	395.7 (100)	13.6 (26.4)	22.8 (44.3)	15.1 (29.3)	51.4 (100)	99.3 (80+)
Health Insurance ⁷													
No	719.8 (21.7)	2107.4 (63.5)	491.7 (14.8)	3318.8 (100)	381.6 (20.2)	1235.8 (65.5)	270.4 (14.3)	1887.9 (100)	144.7 (22.1)	398.4 (60.5)	115.8 (17.6)	658.9 (100)	4097.1 (60-69)
Yes	232.9 (30.0)	486.1 (62.5)	59.2 (7.6)	778.3 (100)	110.2 (34.6)	178.5 (56.0)	29.9 (9.4)	318.6 (100)	27.3 (25.2)	70.7 (65.3)	10.3 (9.5)	108.4 (100)	2206.5 (70-79)
MPCE quintile ⁸													
Poorest	213.5 (27.3)	415.0 (53.0)	154.1 (19.7)	782.6 (100)	120.1 (27.2)	231.8 (52.4)	90.3 (20.4)	442.1 (100)	46.1 (32.5)	62.1 (43.8)	33.5 (23.6)	141.6 (100)	40971.1 (60-69)
Poorer	227.5 (25.1)	532.9 (58.9)	144.9 (16.0)	905.3 (100)	100.9 (22.8)	276.2 (62.3)	66.1 (14.9)	443.2 (100)	35.8 (19.0)	128.2 (67.8)	25.2 (13.3)	189.2 (100)	2206.5 (70-79)
Middle	210.7 (24.9)	525.9 (62.2)	109.2 (12.9)	845.8 (100)	104.4 (21.9)	314.3 (66.1)	57.9 (12.2)	476.7 (100)	31.0 (17.8)	112.4 (64.5)	30.9 (17.7)	174.4 (100)	767.3 (80+)
Richer	160.9 (20.0)	567.6 (70.3)	79.5 (9.8)	808.0 (100)	114.0 (24.4)	305.3 (65.4)	47.2 (10.1)	466.6 (100)	33.1 (22.3)	89.9 (60.6)	25.4 (17.1)	148.4 (100)	767.3 (80+)
Richest	140.3 (18.6)	552.1 (73.1)	63.1 (8.4)	755.4 (100)	52.5 (13.9)	286.6 (75.9)	38.8 (10.3)	377.9 (100)	25.6 (22.8)	76.5 (67.3)	11.3 (10.0)	113.8 (100)	767.3 (80+)
India	952.8 (23.3)	2593.5 (63.3)	550.8 (13.4)	4097.1 (100)	491.9 (22.3)	1414.2 (64.1)	300.3 (13.6)	2206.5 (100)	172.0 (22.4)	469.1 (61.1)	126.2 (16.5)	767.3	7070.9

NOTE: all values round off up to 1 decimal, and weighted as per weights provided by LASI (using national frequency weight); 1 Public health facility includes health post/sub centers; primary health centers; urban health centers; community health center; District/Sub-district/hospital; Government/tertiary/hospital; Govt.AYUSH hospital; 2 Private health facility includes Private hospital/nursing home; Private clinic (OPD based services); NGO/Charity/Trust/Church-run hospital; Private AYUSH hospital; 3 Other health facility utilization includes Health camp; Mobile health care unit; Pharmacy/drugstore; home visit; other; 4 Religion other includes Buddhist/neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, others; 5 Others in Marital Status includes Divorced, Separated, Deserted, Live in Relationship; 6 Pension was estimated only for officially retired by work-related pension elderly; 7 Health insurance covers surgery; test; doctor's visits; medicines; dental care; in home care; hospitalization charge; other charges; 8 MPCE: quintile is monthly per capita consumption expenditure

Table 4d: Health seeking behaviour among different age groups of elderly

Age in years	Health seeking behaviour among different age group of elderly						P value from Chi		
	60-69 yr.: Frequency (percentage)		70-79 yr.: Frequency (percentage)		80 plus yr.: Frequency (percentage)			Total: Frequency (percentage)	
	Yes	No	Yes	No	Yes	No			
Residence									
Rural	3737.2 (58.1)	331.7 (56.2)	1949.5 (30.3)	173.0 (29.3)	749.4 (11.7)	85.0 (14.4)	6436.1 (100)	589.7 (100)	0.001
Urban	1567.7 (57.8)	93.1 (60.1)	863.5 (31.8)	43.59 (28.0)	281.7 (10.4)	18.6 (12.0)	2713.0 (100)	155.2 (100)	0.001
Gender									
Male	2406.7 (56.9)	207.5 (60.3)	1336.0 (31.6)	101.2 (29.4)	486.6 (11.5)	35.2 (10.6)	4229.3 (100)	343.9 (100)	0.001
Female	2898.3 (58.9)	217.3 (54.2)	1477.0 (30.0)	115.3 (28.8)	544.5 (11.1)	68.44 (17.1)	4919.7 (100)	401.0 (100)	0.001
Education									
No Schooling	2859.8 (55.5)	256.4 (52.5)	1627.9 (31.6)	148.4 (30.4)	664.8 (13.0)	83.8 (17.2)	5152.5 (100)	1549.0 (100)	0.001
Less than Primary	570.1 (53.2)	30.1 (47.0)	360.0 (33.6)	24.6 (38.4)	142.6 (13.3)	9.3 (14.5)	1072.7 (100)	281.5 (100)	
Up to middle	1094.9 (65.5)	79.1 (69.2)	440.1 (26.3)	28.4 (24.9)	136.6 (8.2)	6.8 (6.0)	1671.6 (100)	431.8 (100)	
Secondary	386.2 (60.8)	32.4 (75.2)	213.7 (33.6)	8.7 (20.1)	35.8 (5.6)	2.0 (4.7)	635.7 (100)	174.2 (100)	
Higher Secondary or similar	192.1 (67.8)	10.8 (63.6)	73.0 (25.8)	5.0 (29.7)	18.1 (6.4)	1.1 (6.8)	283.2 (100)	112.6 (100)	
College and above	161.4 (62.0)	14.3 (90.1)	71.8 (27.6)	0.9 (5.7)	27.2 (10.4)	0.7 (4.2)	260.4 (100)	73.6 (100)	
Professional course/degree	40.4 (55.4)	1.7 (77.0)	26.4 (36.2)	0.5 (23.1)	6.1 (8.4)	0 (0.0)	72.9 (100)	19.3 (100)	
Religion									
Hindu	4315.5 (57.8)	1396.7 (61.8)	2310.5 (31.0)	605.4 (26.8)	847.3 (11.3)	256.6 (11.4)	7473.2 (100)	2258.7 (100)	0.001
Muslim	652.4 (59.5)	103.7 (53.6)	327.6 (29.9)	63.1 (32.6)	116.3 (10.6)	26.6 (13.8)	1096.4 (100)	193.4 (100)	
Christian	127.9 (59.1)	82.7 (68.5)	64.4 (29.8)	28.4 (23.6)	24.0 (11.1)	9.5 (7.9)	216.3 (100)	120.7 (100)	
Sikh	119.1 (58.6)	13.6 (48.7)	61.5 (30.2)	8.1 (29.2)	22.8 (11.2)	6.2 (22.1)	203.4 (100)	27.9 (100)	
Other ¹	84.5 (56.2)	18.1 (48.1)	46.1 (30.7)	14.3 (38.1)	19.7 (13.1)	5.2 (13.8)	150.3 (100)	37.5 (100)	
None	4.9 (55.5)	1.0 (26.3)	2.9 (33.0)	2.0 (52.8)	1.0 (11.5)	0.8 (20.9)	8.8 (100)	3.9 (100)	
Marital status									
Currently Married	3740.7 (66.9)	1173.7 (71.0)	1492.8 (26.7)	383.3 (23.2)	357.9 (6.4)	96.1 (5.8)	5591.4 (100)	1653.2 (100)	0.001
Widowed	1451.2 (43.1)	395.5 (42.9)	1269.6 (37.7)	323.3 (35.1)	647.8 (19.2)	202.4 (22.0)	3368.6 (100)	921.2 (100)	
Never Married	33.1 (57.3)	17.8 (67.3)	16.2 (28.0)	4.9 (18.6)	8.5 (14.7)	3.7 (14.1)	57.8 (100)	26.5 (100)	
Other ²	79.3 (60.7)	28.7 (69.6)	34.4 (26.4)	9.8 (23.7)	16.9 (12.9)	2.8 (6.7)	130.7 (100)	41.2 (100)	
Currently Employed Status									
Currently working	2062.2 (76.7)	750.7 (79.5)	558.3 (20.8)	168.6 (17.9)	66.5 (2.5)	24.9 (2.6)	2686.9 (100)	944.2 (100)	0.001
Worked in the past but currently not working	1884.7 (46.8)	489.5 (48.9)	1474.4 (36.6)	344.9 (34.5)	667.6 (16.6)	166.1 (16.6)	4026.7 (100)	1000.5 (100)	
Never Worked	1357.4 (55.8)	375.5 (53.9)	779.0 (32.0)	207.9 (29.9)	297.0 (12.2)	113.1 (16.2)	2433.4 (100)	696.5 (100)	
Pension³									
Currently receiving	278.0 (53.0)	93.6 (63.9)	185.4 (35.4)	40.6 (27.8)	60.8 (11.6)	12.1 (8.3)	524.2 (100)	146.3 (100)	0.001
Expected to receive in future	68.5 (84.2)	20.8 (76.7)	12.3 (15.1)	5.8 (21.4)	12.3 (9.7)	0.5 (1.9)	81.4 (100)	27.1 (100)	
Neither currently receiving nor expected	1588.6 (74.0)	532.5 (80.1)	483.1 (22.5)	106.3 (16.0)	74.8 (3.5)	26.3 (3.9)	2146.5 (100)	665.1 (100)	
Health Insurance⁴									
No	4325.2 (56.6)	1311.4 (59.5)	2410.5 (31.6)	616.6 (28.0)	899.6 (11.8)	275.8 (12.5)	7635.3 (100)	2203.8 (100)	0.001
Yes	979.1 (64.7)	304.3 (69.4)	402.5 (26.6)	104.7 (23.9)	131.5 (8.7)	29.2 (6.7)	1513.1 (100)	438.3 (100)	
MPCI⁵ quintile⁵									

Contid...

Table 4d: Contd...

Health seeking behaviour among different age group of elderly

Age in years	60-69 yr.: Frequency (percentage)		70-79 yr.: Frequency (percentage)		80 plus yr.: Frequency (percentage)		Total: Frequency (percentage)		P value from Chi
	Yes	No	Yes	No	Yes	No	Yes	No	
Poorest	1042.4 (56.5)	444.6 (61.8)	594.1 (32.2)	182.0 (25.3)	209.0 (11.3)	92.6 (12.9)	1845.5 (100)	719.3 (100)	0.001
Poorer	1156.8 (58.8)	362.3 (60.0)	565.8 (28.8)	178.0 (29.5)	244.5 (12.4)	63.6 (10.5)	1967.1 (100)	603.9 (100)	
Middle	1078.3 (57.3)	337.4 (60.9)	582.5 (30.9)	160.0 (28.9)	221.9 (11.8)	56.9 (10.2)	1882.8 (100)	554.2 (100)	
Richer	1055.8 (57.7)	282.4 (62.7)	580.4 (31.7)	112.2 (24.9)	193.7 (10.6)	56.1 (12.4)	1829.9 (100)	450.7 (100)	
Richest	970.9 (59.8)	189.0 (60.2)	490.1 (30.2)	89.1 (28.4)	162.0 (10.0)	35.7 (11.4)	1623.1 (100)	313.8 (100)	
India	5304.3 (58.1)	1615.7 (61.2)	2813.0 (30.8)	721.3 (27.3)	1031.1 (11.3)	305.0 (11.5)	9148.4 (100)	2642.0 (100)	0.001

NOTE: all values round off up to 1 decimal, and weighted as per weights provided by LASI (using national frequency weight). 1.Region other includes Buddhist/neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, others. 2.Others in Marital Status includes Divorced, Separated, Deserted, Live in Relationship. 3.Pension was estimated only for officially retired by work-related pension elderly. 4.Health insurance covers surgery; test; doctor's visits; medicines; dental care; in home care; hospitalization change; other changes. 5.MPCE quintile is monthly per capita consumption expenditure